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Appraising Trends in Residential Property Investment Returns Relative to Infrastructure Conditions in Ilorin, Nigeria

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Abstract: Infrastructure serves as an indicator to make real estate investment flourish, build the platform for the real estate investment market to thrive, and also to boost returns on property investment. Despite availability of some infrastructure, the property investment market still plagued with less expected returns as a result of non- functionality of neighborhood infrastructure. The study focused on the appraisal of the trends in residential property investment returns between year 2009 to 2018, relative to infrastructure condition in the study area. Data were obtained from practising real estate firms and residents of selected neighborhoods using a structured questionnaire. The study adopted simple random sampling technique. Out of 2,228 questionnaires administered in the selected neighborhoods, in Ilorin, 664 were returned and valid for the analysis. Descriptive mean method of data analysis was employed, coefficient of variation and spearman's rank-order correlation model was adopted to compare the property investment return in the selected areas of Ilorin and to determine the infrastructure index with benchmark for the minimum acceptable standard condition. Also, Kendall coefficient of concordance was also used to test the relationship among the ranked factors. The result shows that Sabo-Oke and Fate property market of Ilorin performed better than Adewole Housing Estate and GRA (Government Reservation Area) based on risk- return ratio analysis, of which Sabo-Oke and Fate revealed the most consistent property market returns while GRA and Adewole Housing Estate residential market showed high level market volatility due to risky nature of the market. Sabo-Oke and Fate markets showed a stable market at minimum risk ranges between 8%-36%. The infrastructure condition indices in GRA and Adewole Housing Estate is higher than ideal condition index (Benchmark), ranges between 82%-92% and 81%-94% when compared with the average international standard at 60%, while infrastructure conditions in Sabo-Oke and Fate found a bit below the average international standard condition. The study also found that the performance of residential property investment is magnificent in the area where there is a frequent market transaction with good and functional infrastructure, as it is discovered across the selected neighborhoods in Ilorin. The study concluded that infrastructure have weighty influence on residential property investment returns relative to functional infrastructure and that, residential property market performance hinges on functional infrastructure and it must be given extreme consideration when making a property investment decision.

Keywords: Residential property, investment returns, infrastructure, neighborhood trends, Ilorin

1. Introduction

Property investment, like any other forms of investment, is aimed at generating profits (returns) and the goal is achieved through rental income, for example, or through a profitable resale (John, 2008). Returns on property investment indicate the percentage of the invested money returned to a property investor after the deduction of associated costs, thus real estate investment is declared as one of the worthwhile and lucrative forms of investments in the world-wide investment market. This statement is connected to its investment attributes in which high return divergence benefits, as well as the capability for hedging against inflation, make it stand out as reliable investment (Ogunba, Abiyomi & Dugeri, 2013). Property investment indicates real property purchased or developed with the target of earning a return through rental income or future resale of the property. The property may be held by an individual investor, or a group of investors, or a corporation but matters to a property investor is the flow of returns from the investment. Investors in shares and stock, government bonds are pre-occupied with the flow of returns on daily shares prices, price stability and rate of returns, so also, do real estate investors pursue the trends in returns generated by property investment (Ajayi, 2014).

Infrastructure stances as one of useful pointers of urban economic development and it play a dynamic role in the growth and advancement of any urban locale. As a result, it desirably creates an attraction for real estate investment and other forms of investment (Lemo, 2011). Infrastructure is referred to as the fundamental facilities serving neighborhood, city or country for the proper functioning of its economy. It is also attributively referred to structures such as electrical grids, tunnels, sewers, roads, bridges, systemic communications, water supply, that enable, sustain and improve societal living conditions (Mendez, 2007). About 75.5% of the countries in the world that have moved away from poverty and subsistence economy have access to adequate infrastructure services, and this helped them to move away from subsistence economy and poverty (Tomlinson, 2011).

Bello et al., (2013) opined that, all over the world, infrastructure is among one of the significant pointers of real estate development with the approximate 29.75% contribution to the economic development, especially, of the developed world. World Bank Group (2014) postulated that infrastructure has attractive capacity to bring about the actual worth of investment for corporate earnings which in-turn bring relative returns on investment and increase the value for the purchasing power of the real estate investors. According to Ajibola et al., (2013) residential property investments returns cannot be regarded as being sustainable in as much as there is the incidence of the intrinsic problem of insufficient and deficiency in the functionality of infrastructure in an area. The study laid a foundation towards getting an answer to the identified problem which is a course for action; to answer the question of the development of residential investment property returns indices that do not take into consideration the condition of infrastructure indices on the residential property, such indices as value indices, and yields help residential property investors to identify viable residential neighborhoods for investment purposes. There is a problem of low or no returns in property investment in some areas of Ilorin metropolis and this is a course for action. It is on this note that the study evaluated the trends in residential property investment returns relative to infrastructure conditions in Ilorin, Nigeria, from year 2009 to 2018.

The rest of this paper is structured as follows. Section 2 reviews relevant literature. Section 3 presents the methodology and Section 4 discusses the findings. Section 5 concludes.

2. Literature Review

2.1 Infrastructure

National Research Council of Nigeria, NRCN (1999) adopted the term “Public Work Infrastructure” referring to both specific functions and combined system this modal element comprises such as highway, bridges, mass trans, airports and airways, water supply and water resources, waste water management, solid waste treatment and disposal, electricity power supply, generation and transmission, telecommunication and hazardous wastes management. Mendez (2007) and Dimis (2011) clarified the situation that the scope of infrastructure spans not only the public work facilities as described by NRCN but also the operating procedures, management practices and development policies that interact together with societal demand and the physical world to facilitate the transport of the people and goods, provision of water for drinking and variety of other uses which include safe disposal of society’s waste products, provision of energy (electricity) where it is needed and transmission of information within and between communities. World Bank Group (2014) simplifies its description as social “overhead capital”, and it includes public utilities such as power, telecommunication, water supply, sanitation and sewerage; and public works such as roads, dams, and drainage. Canning & Pedroni, (2008) Sodiya, Oyediji, & Bello (2016) agreed that there is a positive correlation between improved infrastructure and economic growth. There has been improved economic growth at 5% per annum in the past despite the World Economic Forum Global Competitiveness Index of 2012 – 2013, indicating that Africa remained the least competitive global region. Shah (1992), Olujimi (2010) and Ajayi (2014) opined that infrastructure facilitates open-up the development of a neighborhood. This is deduced from his study “people’s perception on the choice of location”, it has resulted that, availability of infrastructure among other factors prompted the more than 75% of the resident to choose a particular location.

2.2 Property Investment

Investment can be regarded as an act of laying down or surrendering the present capital with the expectation of reaping the benefit in future in the form of returns which habitually takes the form of an income flow and capital increase (Payne & Holt, 2001; Ajayi, 2014). They further argued that property investment is based on the capital investigation of expected advantages and dangers, with the desire of acknowledging benefits, either instantly or all the more frequently over a broadened period. The future profit could be money related returns or expanded yield. Real property investments are also known as a real investment as they have the potential of yielding returns to investors. In line with this research study, residential property investment refers to the buildings that are strictly for dwelling purposes and which are meant to generate income (returns) either from capital gain or rental income. However, a rational investor is expected to minimise risk to maximise returns from his investment. To ascertain the level of return from an investment, there is a need to appraise comparatively the return from the subject investment with alternative investments, understanding its nature outlets, strength and weakness.

Furthermore, Ajayi (2014) provided critical analysis of the qualities of a good investment, which any potential investor must consider before investing his money on any kind of investment, and this includes; capital invested must be secured, safe return from the investment must be able to recoup the capital in good and reasonable term, liquidity, capital must be seen to be appreciable, hedge against inflation, management and maintenance should be easy, investment should be affordable. According to him, all the above-listed qualities must be critically analysed before an investor can make up his mind to commit his capital on any form of investment outlets opened to him. As outlined by Hoesli & McGregor (2000), the investment market is better understood when investment fundamentals and characteristics of the principal types of investment are identified.

2.3 Income Returns on Investment Analysis Graph

Shipley (2000) as buttressed by Ian (2012) postulated that in property investment analysis, the volume of the cost incurable and expected returns analysis are of paramount importance because they necessitate actual investment planning. Planning concerns the future of the real estate investment and the decisive factor are usually sales, lease, and letting. These activities at each level govern costs incurred and return and if plans have been made in advance on a particular volume, the real estate investor requires an answer to the question. Figure 1 illustrates the changes to returns if sales, leases and letting level changes. What will happen to returns if sales, lease and letting level change. This can be illustrated in the graph below:

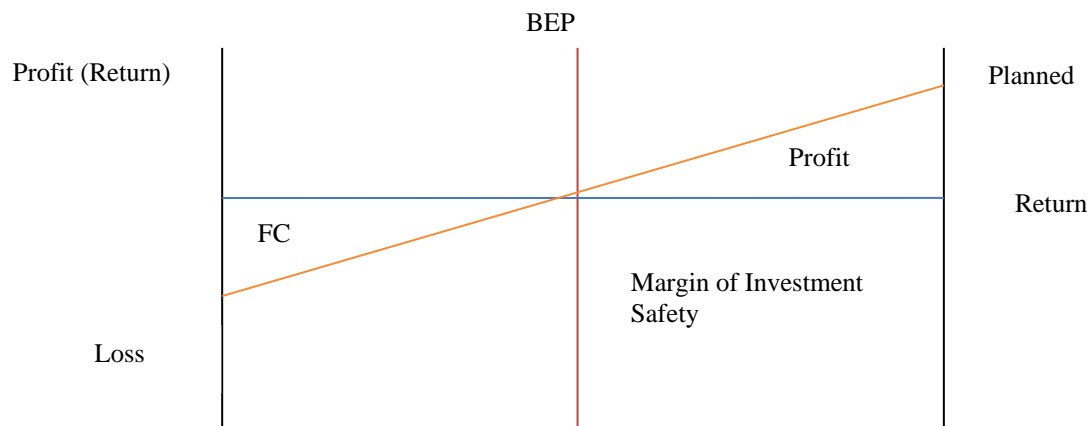


Fig. 1 - Income returns on investment analysis graph

Source: Adapted from Shipley, (2000). But buttressed by Ian, (2012) Heritage Designation and Property Returns

The X-axis of the graph gives the sales, lease and letting volume while the plan shows a return on the investment at a given volume of sale, lease and letting. If the volume is reduced based on the planned cost structure of the real property investment, the extent of the reduction can be measured on the X-axis, and a revised return or profit calculated.

2.4 Infrastructure and Residential Property Investment Returns

Hammer et al. (2000) stated that the provision of adequate infrastructure is central to property investment returns. This is based on the study conducted in Britain. Data was collected on rental and property prices across twelve (12) County Councils juxtaposed with the provision of neighborhood infrastructure in each of the county councils, many othe councils with high quality of facilities had higher returns on property class. Using the inferential method of data

analysis and analytical tool of correlation model, (Johnson et al., 2005) opined that one of the determinants of property investment value is infrastructure, the contribution of infrastructure results to high capital value appreciation in property investment. It was concluded that the annual returns of property is influenced by infrastructure. Corgel et al. (1998) and Dimis (2011) asserted that infrastructural projects abandonment would always affect property investment values in the vicinity. Ajibola et al. (2013) studied the effect of infrastructure on property return in unity estate in Lagos between the years 2003 – 2011. The study utilised a descriptive-analytical method to identify water supply, electricity and road as major infrastructural facilities that are indispensable in the estate. Sodiya et al., (2016) examined the tenants' perception of facilities in residential properties in Abeokuta across public housing estates. The study employed both mean scaling and t-test of significant difference. The result showed that water supply, electricity, gate and wall-fence were relatively important facilities influencing tenants' satisfaction and the study also found a significant difference in rent passing across the housing estate. The study, therefore, concludes that property investment can be improved whenever the additional desired infrastructural component is added to increase the level of tenants' satisfaction.

3. Methodology

The quantitative research approach was adopted in this study and it was framed towards the interface between trends in residential property return and infrastructure conditions in Ilorin. Structured questionnaires in open and close-ended format were used to obtain data from registered real estate firms and residents of the selected neighborhoods using a simple random sampling technique. Out of 1,228 questionnaires administered in the selected neighborhoods, 664 were duly completed and valid, which represents 54% of the questionnaires used for the analysis. The Statistical Package for the Social Sciences (SPSS) was used for data coding, data entry, as well as data cleaning. Analytical techniques include descriptive methods of data analysis; descriptive graph mean was also adopted and ranking method of data analysis (Likert Scaling) with a 5-point scoring format (1 = Very poor, 2 = Poor, 3 = Fair, 4 = Good, and 5 = Very good) was considered for all the items and benchmark for a minimum acceptable condition for infrastructure conditions index (ICI) was adapted from Australian Association of Higher Education Facilities Officers (AAPPA). Also, Kendall coefficient of concordance (KCC) was applied to test the relationship among the ranking factors. The methodology was further substantiated by introducing infrastructure condition rating standard table as the basis for infrastructure condition index, as shown in Table 1.

Table 1 - Showing neighbourhood infrastructure condition rating standard

Condition	General Description	Rating	Condition Index
Very Poor	Neighbourhood in bad state, unit for occupancy, Absence of infrastructure and facilities, pollution and environmental degradation.	1	0.00 - 0.19
Poor	Deteriorated neighbourhood, structural problems, none functional infrastructure, contamination and pollution elements.	2	0.20 - 0.49
Fair	Average neighbourhood condition, evidence of significant defects on infrastructure, malfunctioned of infrastructure facilities, minor environmental and pollution elements.	3	0.50 - 0.74
Good	Minor deterioration of neighbourhood, major maintenance on infrastructure not required, good condition of infrastructure.	4	0.75 - 0.94
Very Good	Neighbourhood not deteriorated, infrastructure is new and in good state, absence of contamination and pollution	5	0.95 -1.00

Source: Adapted from the AAPPA- Australian Association of Higher Education Facilities Officers (updated in 2010)

Note: The Infrastructure Condition Index (ICI) is an index number that indicates the current condition of the infrastructure measured relative to its ideal 'perfect' condition.

$$ICI = \frac{\text{Infrastructure Current Condition}}{\text{Perfect Condition}}$$

4. Results and Discussion

The result of trends analysis of Two Bedroom (2B/R) property returns presented in the above table 2 revealed that Government Reservation Area (GRA) maintained double digits over certain period indicating a better performance based on average, while Adewole Housing Estate, Sabo-Oke and Fate Basin maintained a single-digit indicating a low

performance. In Government Reservation Area (GRA) residential markets revealed that an investor is undertaking risk of 22% in order to have 9.95% return on investment, in Adewole Housing Estate residential market, an investor is undertaking risk of 28% in order to have 6.72% returns on investment, In Sabo Oke residential market, an investor is undertaking risk of 57% in order to have 8.09% return on investment and in Fate-Basin residential market, an investor is undertaking 25% risk in order to have 6.07%. Therefore, GRA residential market is considered preferable to another residential property market, because an investor will take the minimum risk at comparable average return.

Table 2 - Rate of returns of two bedroom (2B/R) residential properties in Ilorin

Year	GRA	Adewole Housing Estate	Sabo Oke	Fate Basin
2009	13.04	6.80	7.98	6.67
2010	10.62	7.07	7.53	6.79
2011	9.39	6.62	7.19	5.29
2012	11.81	7.96	7.66	8.89
2013	11.29	7.24	6.72	6.89
2014	11.50	6.75	7.19	5.75
2015	15.23	3.58	2.79	5.47
2016	19.15	3.49	5.00	3.11
2017	9.12	9.49	8.61	4.90
2018	8.31	8.23	20.21	6.88
Average Rate of return	9.95	6.72	8.09	6.07
Standard deviation	2.22	1.89	4.57	1.54
Coefficient of variation	0.22	0.28	0.57	0.25

Source: Authors' Field Survey 2018

Table 3 - Rate of returns of 4B/R residential properties in Ilorin

Year	GRA	Adewole Housing Estate	Sabo Oke	Fate Basin
2009	6.86	7.55	7.44	7.43
2010	6.38	7.56	7.51	7.51
2011	6.03	7.65	7.65	7.76
2012	6.09	7.58	7.56	6.24
2013	5.88	7.45	7.49	7.73
2014	5.79	7.69	7.75	8.78
2015	3.96	6.65	6.65	7.63
2016	4.21	5.83	5.72	6.46
2017	7.24	8.31	3.09	5.61
2018	14.19	6.45	25.72	8.25
Average Rate of return	6.66	7.27	8.66	7.34
Standard deviation	2.84	0.73	6.17	0.96
Coefficient of variation	0.43	0.10	0.71	0.13

Source: Authors' Field Survey 2018

The result of trends analysis of 4B/R property investment in Ilorin metropolis is presented in Table 3 above revealed that GRA, Adewole Housing Estate, Sabo-Oke and Fate areas maintained a single-digit rate of returns indicating low property performance. Further analysis of risk content was carried out using both standard deviation and coefficient of variation to establish the risk content of 4B/R property across the selected residential market areas also indicates that, in GRA residential markets, an investor is undertaking risk of 43% to have 6.66% return on investment, in Adewole Housing Estate residential market, an investor is undertaking risk of 10% to have 7.27% return on investment, In Sabo Oke property market, an investor is undertaking a risk of 71% to have 8.66% return on investment and in Fate area, an investor is undertaking 13% risk to have 7.34%. Given this, Adewole Housing Estate residential

market is considered a better residential market because s are taking the slightest risk at comparable average return. GRA and Sabo Oke residential market appeared riskier than other market locations when it comes to 4 Bedroom apartment residential property investments.

Table 4 - Analysis of variance in residential property investment in Ilorin

Market	Source of Variation	SS	Df	MS	F	P-value	F crit
2B/R	Between						
	Groups	1281.113	3	427.0378	0.786939	0.509108	2.866266
	Within						
	Groups	19535.65	36	542.6571			
4B/R	Between						
	Groups	3680.701	3	1226.9	1.506561	0.229344	2.866266
	Within						
	Groups	29317.38	36	814.3717			
Total			39				

Source: Author's Computation, 2018

The result of variation in returns on residential properties investment presented in table 4revealed that variation in returns on residential property investment across the markets in Ilorin is statistically insignificant since p-values across the markets are greater than 0.05 levels of significance. This further points out that, returns on property investment are significantly different across the selected areas, this significance is attributed to different nature and condition of infrastructure across the selected neighborhoods this finding implies that the selected areas are differently viable areas to different property investment.

Table 5 - Infrastructure Condition Index (ICI) in Ilorin

Infrastructure	GRA (Alpha- α @0.80)				Adewole Housing Estate (Alpha- α @0.76)				Sabo Oke (Alpha- α @0.85)				Fate Basin (Alpha- α @0.88)			
	N	Sum	Mean	ICI Status	N	Sum	Mean	ICI Status	N	Sum	Mean	ICI Status	N	Sum	Mean	ICI Status
Water supply	153	651	4.25	0.85Good	163	480	2.94	0.59Fair	189	700	3.70	0.74Fair	159	584	3.67	0.73Fair
Electricity	153	643	4.20	0.84Good	163	530	3.25	0.65Fair	189	677	3.58	0.72Fair	159	530	3.33	0.67Fair
Access Road	153	591	3.86	0.77Good	163	498	3.06	0.61Fair	189	750	3.97	0.79Good	159	556	3.50	0.70Fair
Security Infrastructure	153	655	4.28	0.86Good	163	542	3.33	0.67Fair	189	690	3.65	0.73Fair	159	656	4.12	0.82Good
Drainage System	153	684	4.47	0.89Good	163	503	3.09	0.62Fair	189	597	3.16	0.63Fair	159	621	3.91	0.78Good
Waste Disposal	153	652	4.26	0.85Good	163	504	3.09	0.62Fair	189	673	3.56	0.71Fair	159	593	3.73	0.67Fair
Recreation Facilities	153	596	3.90	0.78Good	163	499	3.06	0.61Fair	189	618	3.27	0.65Fair	159	585	3.68	0.74Fair
Education Infrastructure	153	649	4.24	0.85Good	163	524	3.21	0.64Fair	189	658	3.48	0.69Fair	159	574	3.61	0.72Fair
Health Infrastructure	153	646	4.22	0.84Good	163	499	3.06	0.61Fair	189	677	3.58	0.72Fair	159	642	4.04	0.81Good
Street Light	153	650	4.25	0.85Good	163	519	3.18	0.64Fair	189	766	4.05	0.81Good	159	596	3.74	0.75Good
Valid N (list-wise)	153				163				189				159			

Authors' Field Survey 2018

ICI = Infrastructure Condition Index

The Table 5 showed the descriptive analysis of Likert Scale employed on a five-point scale of measurement to establish the mean condition of infrastructure. The study carried out the test of reliability through Cronbach's Alpha and the result revealed that there is a high degree of internal consistency among the variables. The result showed that at a minimum acceptable alpha at 0.75 (75%), all the items across the study areas maintained high level of internal consistency at 80%, 76%, 85% and 88% for GRA, Adewole Housing Estate, Sabo-Oke and Fate Basin respectively. The hypothesised mean or benchmark is calculated as $(n_5 + n_4 + n_3 + n_2 + n_1) / N$. Also, any infrastructure with mean condition higher than the average threshold is referred to as infrastructure with a better condition. The average mean condition index (Benchmark) at 0.6 (3/5) for five-point Likert Scale Infrastructural condition index in GRA ranges between 0.77 and 0.85 (77% and 85%), in Sabo Oke infrastructure condition index (ICI) range 0.59 and 0.64 (56% and 71%), In Fate Basin, ICI ranges between 0.63 and 0.81 (63% and 81%) and in Adewole Housing Estate, ICI ranges between 0.67 and 0.82 (67% and 82%). This further advocate that infrastructure condition in GRA and Adewole Housing Estate is better than Fate-Basin and Fate-Basin is better than Sabo Oke.

Table 6 - Test of relationship among the ranked infrastructure condition in Ilorin

Infrastructure	Ilorin					$\sum T_1^2$	W	r_s
	GRA	Adewole H/E	Sabo Oke	Fate Basin	T_1			
Water supply	4	7	3	5	19	361	0.771 (0.021)	0.505 (0.058)
Electricity	7	2	5	8	22	484		
Access Road	9	6	2	7	24	576		
Security Infrastructure	2	1	4	1	8	64		
Drainage System	1	5	9	3	18	324		
Waste Disposal	3	5	6	5	19	361		
Recreation Facilities	8	6	8	6	28	784		
Education Infrastructure	5	3	7	6	21	441		
Health Infrastructure	6	6	5	2	19	361		
Street Light	4	4	1	4	13	169		

Author's Computation, 2018

Table 6 shows the relationship among the ranked infrastructural variables using Kendall Coefficient of Concordance (W) to test the relationship among the ranking factors and spearman's rank-order correlation to test the level of agreement toward infrastructure condition. The result of significant test relationship was examined using Kendall's Coefficient of Concordance (W). The result revealed that $W = 0.771$ shows a statistical proof of a rational relationship in the ranking of the infrastructure condition across the study area in Ilorin, while the average rank correlation of variables between all possible pairs of the areas $r_s = 0.505$ indicating a weak agreement to the condition of infrastructure across the study areas. By implication, this indicates that, each neighbourhood has its irregularity when it comes to conditions and notwithstanding the overall ranking of these factors across the study area is relatively associated.

Table 7 - Correlation between infrastructure and property investment performance in Ilorin (Null hypothesis testing)

Infrastructure	Dependent	N	Correlation	p-value	Status
Water supply	Aggregate return	664	.75*	0.000	Null hypothesis rejected
Electricity	Aggregated return	664	.791*	0.000	Null hypothesis rejected
Access Road	Aggregate return	664	.743*	0.000	Null hypothesis rejected
Security Infrastructure	Aggregated return	664	.660*	0.010	Null hypothesis rejected
Drainage System	Aggregate return	664	.650*	0.002	Null hypothesis rejected
Waste Disposal	Aggregated return	664	.422	0.100	Null hypothesis accepted
Recreation Facilities	Aggregate return	664	.383	0.220	Null hypothesis

					accepted
Education Infrastructure	Aggregated return	664	.632*	0.031	Null hypothesis rejected
Health Infrastructure	Aggregate return	664	.462	.114	Null hypothesis
					accepted
Street Light	Aggregated return	664	.698*	.005	Null hypothesis rejected

® = Return on Property Investment, N= number of properties

Source: Author' computation, 2018

The result of the null hypothesis testing of no significant relationship between infrastructural index and property performance index is presented in table 7. The null hypothesis is rejected for five infrastructure variables at 0.05 level of precision (water supply, electricity, access road, security infrastructure, drainage system, education infrastructure and street light). There is a strong positive significant relationship between water supply and property return at 0.75 across the study areas in Ilorin. Electricity maintained strong positive significant relationship property return at 0.791. Access road maintained a strong positive significant relationship property return at 0.0001. Security infrastructure maintained strong positive significant relationship property return at 0.660 across the study areas of Ilorin. Drainage maintained a positive significant relationship with property return at 0.650. Educational infrastructure and street light maintained a strong positive significant relationship property return. Recreational facilities educational facilities only maintained a strong positive significant relationship at 0.632 and 0.698 respectively. This indicates that these aforementioned infrastructural variables are likely to cause a significant positive change in return on property investment to cross the areas above, they are therefore positively and strongly correlated property investment performance in the study areas of Ilorin.

5. Conclusion

Residential property investment in Ilorin is seen to be encouraging in the neighborhoods where there is a frequent market transaction with good infrastructure conditions, the results of the study have shown that returns in ideal residential property investment, is hinged on the quality of infrastructure conditions. In addition the study has substantiated that; infrastructure is the strong point of ideal real estate investment as it provided a significant effect on property investment returns in the selected neighborhood of Ilorin. The outcome from the study has convincingly deduced that infrastructure influence residential property investment returns in an ideal property market situation. Therefore, there is a need for quality and adequate provision of good infrastructure to enhance residential property investment returns sustainability in the study area and its environment, of which can be achieved through Public-Private Partnership (PPP). Low maintenance cost concept should also be adopted, and both planned and unplanned maintained schedule should be fully employed and supported by formidable infrastructure policy in order to keep the available infrastructure functioning and continuously maintained.

Feasibility and viability appraisals should be considered essential by carrying it out to know the profitable real estate investment that goes on board and the neighborhood infrastructure should be given good consideration as well as part of appraisal report when taking decision real estate investment. Also, a professional realtor who is knowledgeable in real estate investment concept must consider neighborhood infrastructure as what gives comfortability to the residents and potential real estate investors.

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References

- Ajayi, M.T.A, Jimoh, O.J & Jimoh, R.A. (2014). Effect of infrastructure development on residential property value. *Ethiopian Journal of Environmental Studies & Management* 7(4): 452-459, 2014
- Ajibola, M. O., Awodiran, O. & Salu-Kosoko O. (2013). Effects of infrastructure on property values in Unity Estate, Lagos, Nigeria. *International Journal of Economy, Management and Social Sciences*, 2(5): 195-201
- Bello, M. & Abgatekwe, .A. (2013). Effects of infrastructural facilities on the rental value of residential property, *Journal of Social Sciences*, 5 (4) 332 – 341.
- Canning, D., & Pedroni, P. (2008). Infrastructure, long-run economic growth and causality tests for co-

integrated panels, *Journal of Manchester School*, 76(5): 504-527.

Corgel, J.B., Smith, H.C., & Ling, D.C. (1998). *Investment risk management*. The Atrium, South Gate, Chichester, West Sussex : John Wiley Sons Limited.

Dimis, M. I. (2011). The state of infrastructure in Bauchi Zone. Retrieved from www.cenbank.org/OUT/PUBLICATIONS/RD/Jos-02-5.PDF on the Saturday 8th May, 2010.

Hammer, L., Booth, D. & Love, H.E. (2000). *Poverty and transport: A report prepared for the World Bank in collaboration with DFID, Overseas Development Institute*.

Hoesli, M. & MacGregor, B. (2000). *Property investment: principles and practice of portfolio management*. Longman Essex.

Ian, W. (2012). Housing investment and the private rental sector in Australia. *Urban Studies* 36 (2): 255 – 269

John, H. (2008). Transport investment and house prices. *Journal of Property Valuation and Investment*, 16 (2):144 – 158.

Johnson, T., Davies, K. and Shapiro, E. (2005). *Modern methods of valuation of land, houses and buildings*. Estate Gazette, London.

Lemo, T. O. (2011). The role of social infrastructural facilities in the economy. A Paper Presented at The National Seminar of The Nigeria Institute of Building, Held at Premier Hostel, Ibadan Between 29th And 30th March, 2006.

Mendez, C. (2007). The global concepts of urban infrastructure. *Journal of Land Use and Development Studies*. 2 (1): 30 – 35

Ogunba, O.A, Obiyomi, O. & Dugeri, T. (2013). The inflation hedging potential of commercial property investment in Ibadan, Nigeria, 5th West African Built Environment Research (WABER) Conference, Accra Ghana pg. 1101 – 1111

Olujinmi, A.B. & Bello, M.O. (2010). Effects of infrastructural facilities on the rental values of residential property. *Journal of Social Sciences* 5(4): 332-341, 2009 ISSN 1549-3652 © 2009 Science Publications

Payne, A., & Holt, S. (2001). Diagnosing customer value: Integrating the value process and relationship marketing: *British Journal of Management*, 12 (2): 159-82.

Shah, A. (2002). Dynamics of public infrastructure, industrial productivity and profitability. *The Review of Economic and Statistics*, MIT, Press 74 (1): 9 – 13.

Shipley, R. (2000). Heritage designation and property values: Is there an effect?. *The International Journal of Heritage Studies* 6 (1): 1 – 18.

Sodiya, A K, Oyediji, O. J. & Bello, I. K. (2016). Examination of tenants' perceptions of finishes and facilities in residential properties of public housing estates in Abeokuta Metropolis. *Journal of Management, Social Science and Humanities* Vol. 2 (2): 25-32, April, 2016. the 8th Annual Conference of the Zonal

Tomlinson, M. (2011). The state of urban infrastructure in Nigerian cities. Retrieved from [woods.stanford.edu/docs/water health/StateofAfricanCities.pdf](http://woods.stanford.edu/docs/water%20health/StateofAfricanCities.pdf) on Saturday the 02/04/2011.

World Bank Group (2014). *Private Participation in Infrastructure (PPI), Database on Country-wise Investment Summary*.